

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF APS AND COUNTDOWN PEDESTRIAN SIGNALS ACROSS THE NORTH AND EAST LEGS AT THE INTERSECTION OF MD 704 (MARTIN LUTHER KING JR. HIGHWAY) AND JOHNSON AVENUE IN PRINCE GEORGE'S COUNTY. THE SIGNALIZED PEDESTRIAN CROSSINGS ACROSS THE SOUTH AND WEST LEGS OF THE INTERSECTION WILL BE REMOVED. THE EXISTING VEHICULAR SIGNAL HEADS WILL BE REPLACED WITH LED VEHICULAR SIGNAL HEADS AND NEW NEAR-SIDE LED VEHICULAR SIGNAL HEADS WILL BE ADDED FOR JOHNSON AVENUE. MD 704 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA FOUR PHASE, FULL-TRAFFIC-ACTUATED MODE. THE EXISTING PHASE 2 AND PHASE 8 PEDESTRIAN PHASES WILL REMAIN. THE PHASE 4 AND PHASE 6 PEDESTRIAN PHASES WILL BE REMOVED.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET, CONTROLLER AND ASSOCIATED HARNESSES WILL REMAIN. THE SHA SIGNAL SHOP WILL INSTALL ONE (1) 2 WIRE CENTRAL CONTROL UNIT WITHIN THE CABINET.

APS WILL FUNCTION AS FOLLOWS:

TO CROSS MARTIN LUTHER KING JR. HIGHWAY

- A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS MARTIN LUTHER KING JR. HWY. AT JOHNSON AVENUE"
- B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

TO CROSS JOHNSON AVENUE

- A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS JOHNSON AVENUE AT MARTIN LUTHER KING JR. HWY."
- B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

THE CONTACT PERSONS FOR DISTRICT #3 / OOTS ARE AS FOLLOWS:

District #3

Mr. Brian Young  
Assistant District Engineer - Traffic  
Phone: 301-513-7404

Mr. Augie Reblsh  
District Utility Engineer  
Phone: 301-513-7350

Mr. Wayne Mowdy  
Assistant District Engineer - Maintenance  
Phone: 301-513-7304

Mr. Kevin Nowak  
Assistant District Engineer - Construction  
Phone: 301-513-7385

Office Of Traffic & Safety

Mr. Richard L. Daff Sr.  
Chief, Traffic Operations Division  
Phone: 410-787-7630

Mr. Robert Snyder  
Assistant Division Chief, Traffic Operations  
410-787-7630

Mr. Edward Rodenhizer  
Team Leader, Signal Operations  
Phone: 410-787-7650

Mr. Eugene Bailey  
Team Leader, Sign Operations  
410-787-7670

The Power Company Representative is:  
Baltimore Gas & Electric  
7317 Parkway Drive South  
Hanover, MD 21076  
Phone: 410-859-9062

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO.	QUANTITY	DESCRIPTION
9571	75 SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGNS:
		2 EA - R10-30(1) (9 IN. x 15 IN.) "PUSH BUTTON TO CROSS MLK JR. HWY"
		2 EA - R10-30(1) (9 IN. x 15 IN.) "PUSH BUTTON TO CROSS JOHNSON AVE"
		1 EA SHIELD ASSEMBLY (30 IN. x 51 IN.) "EAST, MD 704, RIGHT ARROW"
		1 EA SHIELD ASSEMBLY (30 IN. x 51 IN.) "WEST, MD 704, RIGHT ARROW"
		1 EA SHIELD ASSEMBLY (48 IN. x 75 IN.) "EAST, MD 704, LEFT ARROW"
		1 EA SHIELD ASSEMBLY (48 IN. x 75 IN.) "WEST, MD 704, LEFT ARROW"

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO.	QUANTITY	DESCRIPTION
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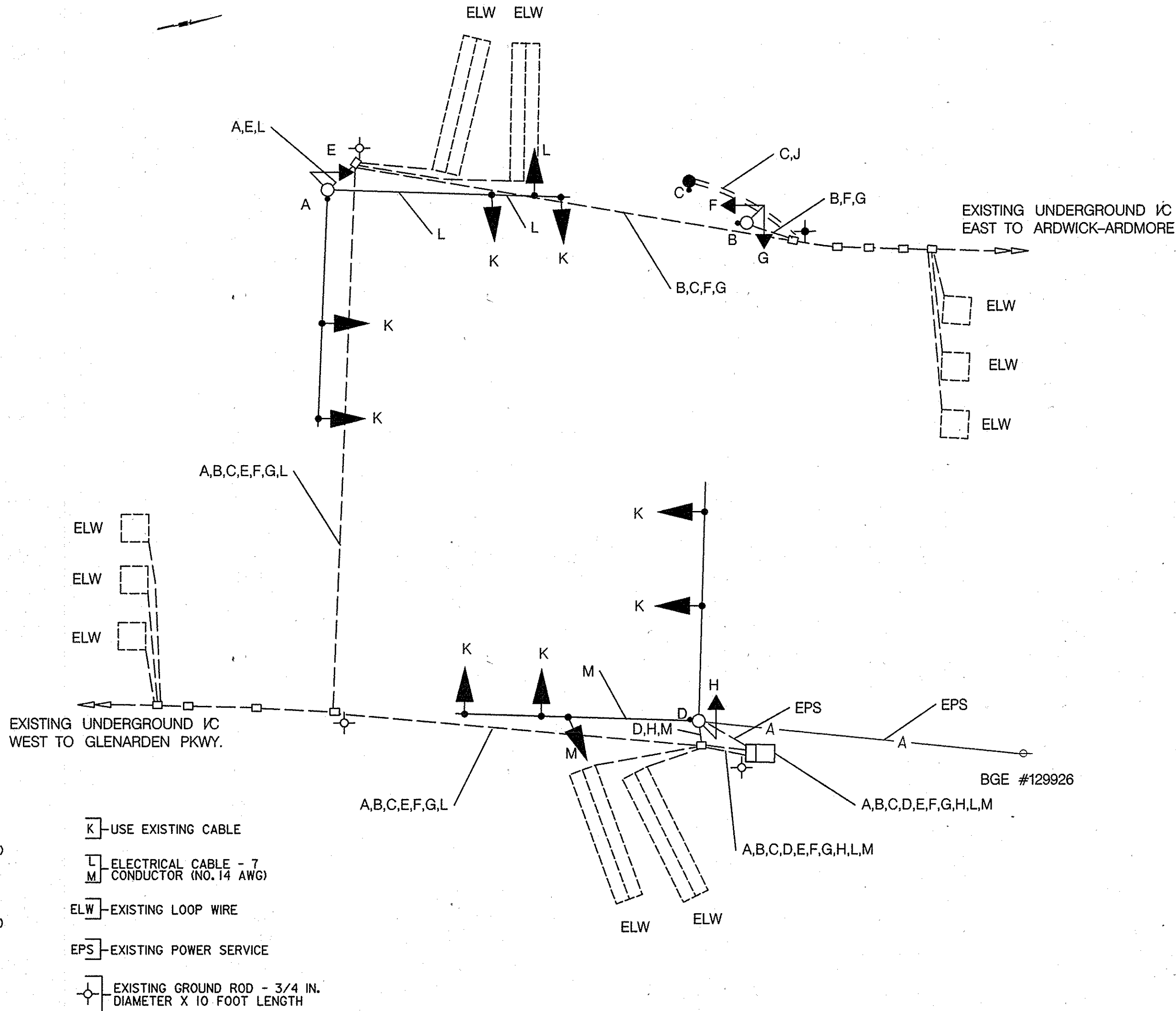
NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1001	2 EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
1002	1200 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
2002	2 CY	TEST PIT EXCAVATION
5001	120 LF	5 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5002	370 LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5003	140 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
6001	140 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	600 SF	5 INCH CONCRETE SIDEWALK
8000	4 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS
8001	30 EA	12 INCH (R,Y,G) LED SIGNAL HEAD SECTION
8003	1 EA	2 WIRE CENTRAL CONTROL UNIT
8010	4 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON
8011	1 EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8014	4 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION - POLE MOUNT
8016	1 EA	REMOVE & DISPOSE OF EQUIPMENT PER ASSIGNMENT
8018	1 EA	REMOVE FOUNDATION 12 INCH DEPTH
8027	50 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
8028	62 SF	DETECTABLE WARNING SURFACES
8033	50 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8046	75 SF	INSTALL OVERHEAD SIGN
8055	1000 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8057	1000 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8058	450 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

WIRING DIAGRAM



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	9	10	11	12	
	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	
PHASE 2 AND 6	G	G	G	G	R	R	R	R	R	R	W/K	W/K	DW	DW	
2 AND 6 PED. CLEARANCE	G	G	G	G	R	R	R	R	R	R	FLDW	FLDW	DW	DW	
PHASE 2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	
PHASE 4 AND 8	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	
PHASE 4 AND 8 CHANGE	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	
PHASE 8 ALT.	R	R	R	R	G	G	G	G	G	G	DW	DW	W/K	W/K	
8 ALT. PED. CLEARANCE	R	R	R	R	G	G	G	G	G	G	DW	DW	FLDW	FLDW	
PHASE 8 ALT. CHANGE	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	

SHA No: PG556A53/B53  
TOD No: XX449-03  
MD 704 @ Johnson Avenue

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 704 (MARTIN LUTHER KING JR. HIGHWAY)  
AT JOHNSON AVENUE

GENERAL INFORMATION

SCALE	NONE	ADVERTISED DATE	05/2008	CONTRACT NO.	XX4495185
DESIGNED BY	MCQ	COUNTY	PRINCE GEORGE'S		
DRAWN BY	MCQ	LOGMILE	16070403.75		
CHECKED BY	BAB CSW	TIMS NO.	I-620		
F.A.P. NO.		TOD NO.			
TS NO. 2357-A-G	DRAWING SG - 02 OF 02	SHEET NO.	2 OF 2		